Claims

We claim:

1. An automated method for use in accordance with a user-interactive processing system, the method comprising the automated steps of:

5   monitoring one or more interactions a user has with one or more applications associated with the processing system;

          processing data obtained in association with the monitoring operation to compute a decision value representative of whether or not the user may need intervention with respect to the one or more applications; and

10   proactively offering the intervention to the user when the computed decision value represents a result indicative that the user is likely to need the intervention.

2. The method of claim 1, wherein the proactively offered intervention comprises assistance provided by an individual through a communication channel established between the user and the individual in accordance with the user-interactive processing system.

15   3. The method of claim 2, wherein the communication channel comprises a connection over a standard telephone line.

4. The method of claim 2, wherein the communication channel comprises a connection over a network with which the user interacts with the one or more applications of the processing system.

20   5. The method of claim 1, wherein the user-interactive processing system comprises one or more servers having one or more electronic commerce-based applications executing in association therewith.

6. The method of claim 5, wherein the one or more electronic commerce-based applications comprise a web storefront.

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7. The method of claim 1, wherein the user-interactive processing system comprises an interactive voice response system.

8. The method of claim 1, wherein the user-interactive processing system comprises a workflow system.

9. Apparatus for use in accordance with a user-interactive processing system, the apparatus comprising:

5   at least one processor coupled to the user-interactive processing system and operative to: (i) process data obtained in association with one or more interactions a user has with one or more applications associated with the processing system to compute a decision value representative of whether or not the user may need intervention with respect to the one or more applications; and (ii) proactively cause the offering of the intervention to the user when the

10   computed decision value represents a result indicative that the user is likely to need the intervention; and

memory, coupled to the at least one processor, for storing at least one of the obtained data and the computed decision value.

10. The apparatus of claim 9, wherein the at least one processor comprises a rule-based

15   decision engine.

11. The apparatus of claim 10, wherein the rule-based decision engine is based on at least one of formal and heuristic reasoning.

12. The apparatus of claim 9, wherein the data obtained is one of raw data and semantic information.

20   13. The apparatus of claim 9, wherein the user-interactive processing system comprises one or more servers having one or more electronic commerce-based applications executing in association therewith.

14. The apparatus of claim 9, wherein the user-interactive processing system comprises an interactive voice response system.

15. The apparatus of claim 9, wherein the user-interactive processing system comprises a workflow system.

16. A network-based system, the system comprising:

at least one server operative to execute one or more electronic commerce-based

5   applications for use by at least one customer via a network; and

at least one decision engine coupled to the at least one server and operative to: (i) process data obtained in association with one or more interactions the customer has with the one or more electronic commerce-based applications to compute a decision value representative of whether or not an action should be taken with respect to the customer; and (ii) proactively taking

10   the action with respect to the customer when the computed decision value represents a result indicative that the action should be taken with respect to the customer.

17. The system of claim 16, wherein the proactively taken action comprises offering assistance provided by a customer service representative through a communication channel established between the customer and the customer service representative in accordance with the

15   at least one server.

18. The system of claim 16, wherein the proactively taken action comprises presenting to the user data relevant to the one or more electronic commerce-based applications, wherein the relevant data is related to options available to the customer.

19. The system of claim 18, wherein the computed decision value is based on one or

20   more attributes comprising at least one of: (i) an attribute representative of a business value associated with the customer or the one or more applications; (ii) an attribute representative of a frustration level attributable to the customer with respect to the one or more interactions; (iii) an attribute representative of an estimated profit opportunity associated with the customer; and (iv) an attribute representative of availability of resources capable of taking the action.

25   20. The system of claim 16, further comprising one or more client computing devices coupled to the at least one server for use by the customer in interacting with the at least one server.

21. The system of claim 16, further comprising at least one database coupled to the at least one decision engine for use in obtaining data to be processed by the decision engine.

22. The system of claim 16, wherein the data network comprises the Internet.

23. An article of manufacture for use in accordance with a user-interactive processing system, the article comprising a machine readable medium containing one or more programs which when executed implement the steps of:

processing data obtained in association with one or more interactions a user has with one or more applications associated with the processing system to compute a decision value representative of whether or not the user may need intervention with respect to the one or more applications; and

proactively causing the offering of the intervention to the user when the computed decision value represents a result indicative that the user is likely to need the intervention.